

AMENDMENTS TO THE CLAIMS:

Please amend Claims 78, 79, 83, 85, 87, 91, 99, 100, 102, and 127 through 132 as follows. Note that all the claims currently pending in this application, including those not presently being amended, have been reproduced below for the Examiner's convenience.

1-77. (Cancelled)

78. (Currently Amended) A system comprising:

a transmitter that is configured to transmit data on a selected one of a first satellite communication channel and a second satellite communication channel, the first satellite communication channel having a bit rate lower than that of the second satellite communication channel; and

E1 a receiver that is configured to receive, on a selected one of the first satellite communication channel and the second satellite communication channel, the data transmitted by said transmitter,

wherein said system comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, and a load factor comparison unit that is configured to compare the load factor of the first satellite communication channel to the load factor of the second satellite communication channel to determine if the load factor of the first satellite communication channel is lower than the load factor of the second satellite communication channel, and

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected, and the selection switches from the second satellite communication channel to the first satellite communication channel in response to a determination that signal strength is below a predetermined value, then the first satellite communication channel is selected; and

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(b) when the first satellite communication channel is selected, and the selection switches from the first satellite communication channel to the second satellite communication channel in response to a determination that both of the following conditions are satisfied: (i) signal strength is above a predetermined value and (ii) said load factor comparison unit compares the load factor of the first satellite communication channel to the load factor of the second satellite communication channel and determines that the load factor of the second satellite communication channel has a load factor is lower than that the load factor of the first satellite communication channel; ~~then the second satellite communication channel is selected.~~

79. (Currently Amended) A system according to Claim 78, wherein said transmitter ~~effects~~ makes the selection.

80. (Previously Added) A system according to Claim 79, wherein said receiver comprises a signal strength detector that detects the signal strength, and wherein said receiver transmits the signal strength to the transmitter.

81. (Previously Added) A system according to Claim 80, wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio.

82. (Previously Added) A system according to Claim 79, wherein said transmitter transmits to said receiver an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected.

83. (Currently Amended) A system according to Claim 79, wherein said transmitter comprises a said load factor determination unit ~~that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel.~~

84. (Previously Added) A system according to Claim 78, wherein said receiver comprises a tuner that is configured to tune to the selected one of the first satellite communication channel and the second satellite communication channel, and a demodulator that is configured to demodulate a signal from the tuned channel.

85. (Currently Amended) A system according to Claim 78, wherein said receiver ~~effects~~ makes the selection.

86. (Previously Added) A system according to Claim 85, wherein said receiver comprises a signal strength detector that detects the signal strength.

87. (Currently Amended) A system ~~according to Claim 86,~~ comprising:
a transmitter that is configured to transmit data on a selected one of a
first satellite communication channel and a second satellite communication channel, the
first satellite communication channel having a bit rate lower than that of the second
satellite communication channel; and

a receiver that is configured to receive, on a selected one of a first
satellite communication channel and a second satellite communication channel, the first
satellite communication channel having a bit rate lower than that of the second satellite
communication channel; and

a receiver that is configured to receive, on a selected one of the first
satellite communication channel and the second satellite communication channel, the
data transmitted by said transmitter,

wherein the selection between the first satellite communication channel
and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected and
signal strength is below a predetermined value, then the first satellite communication
channel is selected; and

(b) when the first satellite communication channel is selected and (i)
signal strength is above a predetermined value and (ii) the second satellite
communication channel has a load factor lower than that of the first satellite
communication channel, then the second satellite communication channel is selected,

wherein said receiver effects the selection,

wherein said receiver comprises a signal strength detector that detects
the signal strength, and

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio.

88. (Previously Added) A system according to Claim 85, wherein said receiver transmits to said transmitter an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected.

89. (Previously Added) A system according to Claim 88, wherein said receiver transmits the indication to said transmitter via a telephone line, a packet network, or the internet.

90. (Previously Added) A system according to Claim 88, wherein said receiver transmits the indication to said transmitter via a satellite return channel.

91. (Currently Amended) A system according to Claim 85, wherein said transmitter comprises a the load factor determination unit ~~that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel.~~

92. (Previously Added) A system according to Claim 91, wherein said transmitter transmits the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, as determined by said load factor determination unit, to said receiver.

93. (Previously Added) A system according to Claim 78, wherein the first satellite communication channel and the second satellite communication channel employ signals having different polarizations.

94. (Previously Added) A system according to Claim 93, wherein one of the first satellite communication channel and the second satellite communication channel employs a left-hand circularly polarized signal and the other employs a right-hand circularly polarized signal.

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95. (Previously Added) A system according to Claim 78, wherein the first satellite communication channel and the second satellite communication channel employ signals having different frequencies.

96. (Previously Added) A system according to Claim 78, wherein the first satellite communication channel and the second satellite communication channel are transmitted from different transponders of a single satellite.

97. (Previously Added) A system according to Claim 78, wherein the first satellite communication channel and the second satellite communication channel are transmitted by a single satellite.

98. (Previously Added) A system according to Claim 78, wherein the load factor of a channel is a function of a load level of the channel and a bit rate of the channel.

99. (Currently Amended) A system comprising:

a transmitter that is configured to transmit data on a selected one of a first satellite communication channel and a second satellite communication channel, the first satellite communication channel having a power level higher than that of the second satellite communication channel; and

a receiver that is configured to receive, on a selected one of the first satellite communication channel and the second satellite communication channel, the data transmitted by said transmitter,

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wherein said system comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, and a load factor comparison unit that is configured to compare the load factor of the first satellite communication channel to the load factor of the second satellite communication channel to determine if the load factor of the first satellite communication channel is lower than the load factor of the second satellite communication channel, and

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected, and the selection switches from the second satellite communication channel to the first satellite communication channel in response to a determination that signal strength is below a predetermined value, ~~then the first satellite communication channel is selected;~~ and

(b) when the first satellite communication channel is selected, and the selection switches from the first satellite communication channel to the second satellite

communication channel in response to a determination that both of the following conditions are satisfied: (i) signal strength is above a predetermined value and (ii) said load factor comparison unit compares the load factor of the first satellite communication channel to the load factor of the second satellite communication channel and determines that the load factor of the second satellite communication channel has a load factor is lower than that the load factor of the first satellite communication channel; then the second satellite communication channel is selected.

100. (Currently Amended) A system according to Claim 99, wherein said transmitter effects the selection,

wherein said receiver comprises a signal strength detector that detects the signal strength,

wherein said receiver transmits the signal strength to the transmitter,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein said transmitter transmits to said receiver an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected, and

wherein said transmitter comprises a said load factor determination unit [that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel].

101. (Previously Added) A system according to Claim 99, wherein said receiver comprises a tuner that is configured to tune to the selected one of the first

satellite communication channel and the second satellite communication channel, and a demodulator that is configured to demodulate a signal from the tuned channel.

102. (Currently Amended) A system according to Claim 99, wherein said receiver effects the selection,

wherein said receiver comprises a signal strength detector that detects the signal strength,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein said receiver transmits to said transmitter an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected,

wherein said transmitter comprises a said load factor determination unit [that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel], and

wherein said transmitter transmits the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, as determined by said load factor determination unit, to said receiver.

103. (Previously Added) A system according to Claim 102, wherein said receiver transmits the indication to said transmitter via a satellite return channel.

104. (Previously Added) A system according to Claim 99, wherein one of the first satellite communication channel and the second satellite communication channel employs a left-hand circularly polarized signal and the other employs a right-hand circularly polarized signal.

105. (Previously Added) A system according to Claim 99, wherein the first satellite communication channel and the second satellite communication channel are transmitted from different transponders of a single satellite.

106. (Previously Added) A system according to Claim 99, wherein the load factor of a channel is a function of a load level of the channel and a bit rate of the channel.

107. (Previously Added) The receiver according to Claim 78.

108. (Previously Added) The receiver according to Claim 80.

109. (Previously Added) The receiver according to Claim 83.

110. (Previously Added) The receiver according to Claim 86.

111. (Previously Added) The receiver according to Claim 90.

112. (Previously Added) The receiver according to Claim 92.

113. (Previously Added) The receiver according to Claim 99.
114. (Previously Added) The receiver according to Claim 100.
115. (Previously Added) The receiver according to Claim 102.
116. (Previously Added) The receiver according to Claim 106.
117. (Previously Added) The transmitter according to Claim 78.
118. (Previously Added) The transmitter according to Claim 80.
119. (Previously Added) The transmitter according to Claim 83.
120. (Previously Added) The transmitter according to Claim 86.
121. (Previously Added) The transmitter according to Claim 90.
122. (Previously Added) The transmitter according to Claim 92.
123. (Previously Added) The transmitter according to Claim 99.
124. (Previously Added) The transmitter according to Claim 100.

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125. (Previously Added) The transmitter according to Claim 102.

126. (Previously Added) The transmitter according to Claim 106.

127. (Currently Amended) A method comprising:

selecting one of a first satellite communication channel and a second satellite communication channel for transmitting data from a transmitter to a receiver, the first satellite communication channel having a bit rate lower than that of the second satellite communication channel,

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wherein said selecting step comprises a step of determining the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, and a step of comparing the load factor of the first satellite communication channel to the load factor of the second satellite communication channel to determine if the load factor of the first satellite communication channel is lower than the load factor of the second satellite communication channel, and

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected, and the selection switches from the second satellite communication channel to the first satellite communication channel in response to a determination that signal strength is below a predetermined value, then the first satellite communication channel is selected; and

(b) when the first satellite communication channel is selected, and the selection switches from the first satellite communication channel to the second satellite communication channel in response to a determination that both of the following conditions are satisfied: (i) signal strength is above a predetermined value and (ii) said load factor comparing step compares the load factor of the first satellite communication channel to the load factor of the second satellite communication channel and determines that the load factor of the second satellite communication channel has a load factor is lower than that the load factor of the first satellite communication channel; then the second satellite communication channel is selected.

128. (Currently Amended) A method according to Claim 127, wherein the selection is effected by the transmitter,

wherein the receiver comprises a signal strength detector that detects the signal strength,

wherein the receiver transmits the signal strength to the transmitter,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein the transmitter transmits to the receiver an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected, and

wherein the transmitter comprises a load factor determination unit that is configured to [determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel] perform said load factor determining step.

129. (Currently Amended) A method ~~according to Claim 127~~

comprising:

selecting one of a first satellite communication channel and a second satellite communication channel for transmitting data from a transmitter to a receiver, the first satellite communication channel having a bit rate lower than that of the second satellite communication channel,

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected and signal strength is below a predetermined value, then the first satellite communication channel is selected; and

(b) when the first satellite communication channel is selected and (i) signal strength is above a predetermined value and (ii) the second satellite communication channel has a load factor lower than that of the first satellite communication channel, then the second satellite communication channel is selected,

wherein the receiver effects the selection,

wherein the receiver comprises a signal strength detector that detects the signal strength,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein the receiver transmits to the transmitter an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected,

wherein the transmitter comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, and

wherein the transmitter transmits the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, as determined by said load factor determination unit, to the receiver.

130. (Currently Amended) A method comprising:

selecting one of a first satellite communication channel and a second satellite communication channel for transmitting data from a transmitter to a receiver, the first satellite communication channel having a power higher than that of the second satellite communication channel,

wherein said selecting step comprises a step of determining the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, and a step of comparing the load factor of the first satellite communication channel to the load factor of the second satellite communication channel to determine if the load factor of the first satellite communication channel is lower than the load factor of the second satellite communication channel, and

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected, and the selection switches from the second satellite communication channel to the first satellite communication channel in response to a determination that signal strength is

below a predetermined value, ~~then the first satellite communication channel is selected;~~
and

(b) when the first satellite communication channel is selected, and the selection switches from the first satellite communication channel to the second satellite communication channel in response to a determination that both of the following conditions are satisfied: (i) signal strength is above a predetermined value and (ii) said load factor comparing step compares the load factor of the first satellite communication channel to the load factor of the second satellite communication channel and determines that the load factor of the second satellite communication channel has a load factor is lower than that the load factor of the first satellite communication channel; ~~then the second satellite communication channel is selected.~~

131. (Currently Amended) A method according to Claim 130, wherein the selection is effected by the transmitter,

wherein the receiver comprises a signal strength detector that detects the signal strength,

wherein the receiver transmits the signal strength to the transmitter,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein the transmitter transmits to the receiver an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected, and

wherein the transmitter comprises a load factor determination unit that is configured to [determine the load factor of the first satellite communication channel

and the load factor of the second satellite communication channel] perform said load factor determining step.

132. (Currently Amended) A method according to Claim 130, wherein the receiver effects the selection,

wherein the receiver comprises a signal strength detector that detects the signal strength,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein the receiver transmits to the transmitter an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected,

wherein the transmitter comprises a load factor determination unit that is configured to [determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel] perform said load factor determining step, and

wherein the transmitter transmits the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, as determined by said load factor determination unit, to the receiver.

[Please add new Claims 133 and 134 to read as follows.]

--133. (New) A system comprising:

a transmitter that is configured to transmit data on a selected one of a first satellite communication channel and a second satellite communication channel, the first satellite communication channel having a bit rate lower than that of the second satellite communication channel; and

a receiver that is configured to receive, on a selected one of a first satellite communication channel and a second satellite communication channel, the first satellite communication channel having a bit rate lower than that of the second satellite communication channel; and

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a receiver that is configured to receive, on a selected one of the first satellite communication channel and the second satellite communication channel, the data transmitted by said transmitter,

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected and signal strength is below a predetermined value, then the first satellite communication channel is selected; and

(b) when the first satellite communication channel is selected and (i) signal strength is above a predetermined value and (ii) the second satellite communication channel has a load factor lower than that of the first satellite communication channel, then the second satellite communication channel is selected,

wherein said receiver comprises a signal strength detector that detects the signal strength, and

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio.

134. (New) A method comprising:

selecting one of a first satellite communication channel and a second satellite communication channel for transmitting data from a transmitter to a receiver, the first satellite communication channel having a bit rate lower than that of the second satellite communication channel,

wherein the selection between the first satellite communication channel and the second satellite communication channel is made such that:

(a) when the second satellite communication channel is selected and signal strength is below a predetermined value, then the first satellite communication channel is selected; and

(b) when the first satellite communication channel is selected and (i) signal strength is above a predetermined value and (ii) the second satellite communication channel has a load factor lower than that of the first satellite communication channel, then the second satellite communication channel is selected,

wherein the receiver comprises a signal strength detector that detects the signal strength,

wherein the signal strength is determined in accordance with an energy-per-bit to noise ratio,

wherein the receiver transmits to the transmitter an indication as to which of the first satellite communication channel and the second satellite communication channel has been selected,

wherein the transmitter comprises a load factor determination unit that is configured to determine the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, and

wherein the transmitter transmits the load factor of the first satellite communication channel and the load factor of the second satellite communication channel, as determined by said load factor determination unit, to the receiver.--

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